

We claim:

1. A method of conveying a message from a first application to at least a second application using a transport infrastructure, the method comprising the steps of:

generating a first service identifier associated with the second application;

retrieving a first set of parameters from a first directory using the first service identifier, the first set of parameters being required by the transport infrastructure to transmit the message from the first application to the second application; and

passing the message and the retrieved first set of parameters to the transport infrastructure, wherein the transport infrastructure conveys the message to the second application.

2. The method according to claim 1, further comprising the steps of:

triggering the second application upon arrival of the message;

generating a second service identifier;

retrieving a second set of parameters from a second directory using the second service identifier; and

retrieving the message from the transport infrastructure using at least some of the retrieved second set of parameters.

3. The method according to claim 2, wherein the first directory is the second directory.

4. The method according to claim 1, wherein the message is conveyed asynchronously with respect to the operation of the first application.

OST
Lay
rearranged
pg 9

00420277.1

1 5. The method according to claim 1, further comprising the step of
2 updating the first directory.

1 6. The method according to claim 5, wherein the updating of the
2 first directory is in response to a change with respect to the second application
3 and wherein the updating of the first directory and the change with respect to the
4 second application do not necessitate any modification to the first application.

5 7. The method according to claim 6, wherein the change with
6 respect to the second application is a change in location of the second application.

1 8. The method according to claim 6, wherein the change with
2 respect to the second application is a change in a platform on which the second
3 application runs.

1 9. The method according to claim 5, wherein the updating of the
2 first directory is in response to a change in default settings contained in the first
3 directory.

1 10. The method according to claim 9, wherein the change in
2 default settings reflects a change in the desired operation of the transport
3 infrastructure.

1 11. The method according to claim 10, wherein the change in the
2 desired operation of the transport infrastructure is a change in priority of
3 messages to be conveyed.

1 12. The method according to claim 6, wherein the updating of the
2 first directory is in response to a change with respect to transport infrastructure
3 and wherein the updating of the first directory and the change with respect to the
4 transport infrastructure do not necessitate any modification to the first
5 application.

1 13. The method according to claim 12, wherein the change with
2 respect to transport infrastructure is a change with respect to a physical
3 configuration of the transport infrastructure.

1 14. The method according to claim 12, wherein the change with
2 respect to transport infrastructure is a change with respect to an interface of the
3 transport infrastructure.

1 15. The method according to claim 12, wherein the change with
2 respect to transport infrastructure is a change with respect to a software
3 component of the transport infrastructure.

1 16. The method according to claim 12, wherein the change with
2 respect to transport infrastructure is a change with respect to a message routing
3 used by the transport infrastructure.

1 17. The method according to claim 1, wherein the first set of
2 parameters includes routing information with respect to the second application .

1 18. The method according to claim 1, wherein the retrieving step
2 further comprises the step of using the first service identifier to perform a look-up
3 in the first directory in order to retrieve the first set of parameters from the first
4 directory.

1 19. The method according to claim 1, wherein the first directory
2 includes a plurality of sets of parameters and wherein the retrieving step further
3 comprises the step of retrieving only the first set of parameters which are
4 associated with the first service identifier.

1 20. The method according to claim 1, further comprising the step
2 of archiving the message prior to its conveyance to the second application .

1 21. The method according to claim 1, further comprising the step
2 of tracing a message which has been passed to the transport infrastructure for
3 conveyance.

1 22. The method according to claim 1, further comprising the step
2 of reconciling messages which have been passed to the transport infrastructure for
3 conveyance.

1 23. The method according to claim 1, further comprising the step
2 of the first application generating a control block which contains the first service
3 identifier.

1 24. The method according to claim 23, further comprising the step
2 of the application generating a flag which changes a Logical Unit of Work setting
3 for a conveyed message, the flag being contained in the control block.

1 25. The method according to claim 23, further comprising the step
2 of the application generating a flag which changes a persistence setting, the flag
3 being contained in the control block.

1 26. The method according to claim 23, further comprising the step
2 of the application generating a priority indication which increases or decreases a
3 priority of the message, the priority indication being contained in the control
4 block.

1 27. The method according to claim 23, further comprising the step
2 of the application generating override parameters, the override parameters being
3 contained in the control block and overriding any corresponding ones of the
4 retrieved first set of parameters.

1 28. The method according to claim 1, further comprising the step
2 of the transport infrastructure conveying the message to an intermediate Message
3 Processing Server (MPS).

1 29. The method according to claim 28, wherein the first service
2 identifier is associated with MPS.

1 30. The method according to claim 28, further comprising the step
2 of the MPS performing an operation on the message.

1 31. The method according to claim 28, further comprising the step
2 of determining the operation to be performed by the MPS according to the
3 contents of the message.

1 32. The method according to claim 28, further comprising the
2 steps of:
3 triggering the MPS upon arrival of the message;
4 generating a second service identifier;

5 retrieving a second set of parameters from a second directory using
6 the second service identifier; and
7 retrieving the message from the transport infrastructure using at
8 least some of the retrieved second set of parameters.

1 33. The method according to claim 32, further comprising the
2 steps of:

3 the MPS performing an operation on the retrieved message;
4 the MPS extracting a third service identifier from the retrieved
5 message;

6 retrieving a third set of parameters from the second directory using
7 the third service identifier; and

8 passing the message and the retrieved third set of parameters to the
9 transport infrastructure, wherein the transport infrastructure conveys the message
10 to the second application.

1 34. The method according to claim 33, wherein the operation
2 performed on the message further comprises the step of reformatting the message.

1 35. The method according to claim 34, wherein the message is
2 reformatting for a platform on which the second application runs.

1 36. The method according to claim 28, wherein the message is also
2 to be conveyed to a third application, the method further comprising the steps of:

3 the MPS retrieving the message from the infrastructure as
4 conveyed from the first application;

5 the MPS causing the infrastructure to convey the message to both
6 the second application and the third application.

1 37. The method according to claim 36, wherein the MPS causes
2 the infrastructure to convey the message to both the second application and the
3 third application by:

4 the MPS extracting a second service identifier from the retrieved
5 message;

6 retrieving a second set of parameters from a second directory using
7 the second service identifier; and

8 passing the message and the retrieved second set of parameters to
9 the transport infrastructure, wherein the transport infrastructure conveys the
10 message to both the second application and the third application in response to the
11 second set of parameters.

1 38. The method according to claim 36 wherein the MPS causes the
2 infrastructure to convey the message to both the second application and the third
3 application by:

4 the MPS extracting a second service identifier from the retrieved
5 message;

6 retrieving a second set of parameters and a third set of parameters
7 from a second directory using the second service identifier;

8 passing the message and the retrieved second set of parameters to
9 the transport infrastructure, wherein the transport infrastructure conveys the
10 message to the second application in response to the second set of parameters;
11 and

12 passing the message and the retrieved third set of parameters to the
13 transport infrastructure, wherein the transport infrastructure conveys the message
14 to the third application in response to the third set of parameters.

1 39. The method according to claim 36, wherein the routing of the
2 message is determined based on the content of the message.

1 40. The method according to claim 36, further comprising the
2 steps of:
3 triggering the MPS upon arrival of the message;
4 generating a second service identifier;
5 retrieving a second set of parameters from a second directory using
6 the second service identifier;
7 wherein the MPS causes the infrastructure to convey the message
8 to both the second application and the third application by:
9 the MPS extracting a third service identifier from the retrieved
10 message;
11 retrieving a third set of parameters from a third directory using the
12 third service identifier; and
13 passing the message and the retrieved third set of parameters to the
14 transport infrastructure, wherein the transport infrastructure conveys the message
15 to both the second application and the third application in response to the third set
16 of parameters.

1 41. A system for conveying a message from a first application to at
2 least a second application using a transport infrastructure, the system comprising:
3 a sending module coupled to the first application and the transport
4 infrastructure, the sending module receiving a first service identifier from the first
5 application, the first service identifier being associated with the message and
6 being associated with the second application; and
7 a first directory containing at least a first set of parameters, the first
8 set of parameters being required by the transport infrastructure to transmit the
9 message from the first application to the second application, the sending module
10 retrieving the first set of parameters from the first directory in response to receipt
11 of the first service identifier;

12 wherein the sending module passes the retrieved first set of
13 parameters to the transport infrastructure and the transport infrastructure conveys
14 the message to the second application, and wherein the first application is
15 ignorant of the contents of the first set of parameters.

1 42. The system according to claim 1, further comprising:
2 a receiving module coupled to the second application and the
3 transport infrastructure, the receiving module receiving a second service identifier
4 from the second application; and
5 a second directory containing at least a second set of parameters,
6 the second set of parameters being required to retrieve the message from the
7 transport infrastructure, wherein the receiving module retrieves the second set of
8 parameters from the second directory in response to receipt of the second service
9 identifier and wherein the receiving module retrieves the message from the
10 transport infrastructure using at least some of the retrieved second set of
11 parameters.

1 43. The system according to claim 42, wherein the first directory is
2 the second directory.

1 44. The system according to claim 41, wherein the message is
2 conveyed asynchronously with respect to the operation of the first application.

1 45. The system according to claim 41, further comprising a
2 plurality of sets of parameters contained in the first directory.

1 46. The system according to claim 45, wherein the sets of
2 parameters are default parameters required for the operation of the transport
3 infrastructure.

4 47. The system according to claim 41, further comprising updates
5 to the first directory.

1 48. The system according to claim 47, wherein the updates reflect
2 a change with respect to the second application and wherein the updates do not
3 necessitate any modification to the first application.

4 49. The system according to claim 48, wherein the change with
5 respect to the second application is a change in location of the second application.

1 50. The system according to claim 48, wherein the change with
2 respect to the second application is a change in a platform on which the second
3 application runs.

1 51. The system according to claim 47, wherein the updates modify
2 default settings contained in the first directory.

1 52. The system according to claim 51, wherein the updates reflect
2 a change in the desired operation of the transport infrastructure.

1 53. The system according to claim 52, wherein the change in the
2 desired operation of the transport infrastructure is a change in priority of
3 messages to be conveyed.

1 54. The system according to claim 47, wherein the updates reflect
2 a change in the transport infrastructure and wherein the updates do not necessitate
3 any modification to the first application.

1 55. The system according to claim 54, further comprising a
2 physical configuration of the transport infrastructure, wherein the change in the
3 transport infrastructure is a change with respect to the physical configuration of
4 the transport infrastructure.

1 56. The system according to claim 54, further comprising an
2 interface between the sending module and the transport infrastructure, wherein
3 the change in the transport infrastructure is a change with respect to an interface
4 of the transport infrastructure.

1 57. The system according to claim 54, further comprising a
2 software component in the transport infrastructure, wherein the change with
3 respect to transport infrastructure is a change with respect to the software
4 component of the transport infrastructure.

1 58. The system according to claim 54, wherein the change with
2 respect to transport infrastructure is a change with respect to a message routing
3 used by the transport infrastructure.

1 59. The system according to claim 41, wherein the first set of
2 parameters comprises routing information with respect to the second application .

1 60. The system according to claim 41, further comprising an
2 archiving module that archives the message.

1 61. The system according to claim 41, further comprising a tracing
2 module that traces a message which has been passed to the transport
3 infrastructure for conveyance.

1 62. The system according to claim 61, further comprising a
2 reconciling module that reconciles messages which have been passed to the
3 transport infrastructure for conveyance.

1 63. The system according to claim 41, further comprising a control
2 block generated by the first application, the control block containing the first
3 service identifier.

1 64. The system according to claim 63, further comprising a flag
2 generated by the first application, the flag changing a Logical Unit of Work
3 setting for a conveyed message, the flag being contained in the control block.

1 65. The system according to claim 63, further comprising a flag
2 generated by the first application, the flag changing a persistence setting, the flag
3 being contained in the control block.

1 66. The system according to claim 63, further comprising a
2 priority indication generated by the first application, the priority indication
3 increasing or decreasing a priority of the message, the priority indication being
4 contained in the control block.

1 67. The system according to claim 63, further comprising override
2 parameters generated by the first application, the override parameters being

3 contained in the control block and overriding any corresponding ones of the
4 retrieved first set of parameters.

1 68. The system according to claim 41, further comprising a
2 Message Processing Server (MPS) coupled to the transport infrastructure.

1 69. The system according to claim 68, wherein the first service
2 identifier is associated with MPS.

1 70. The system according to claim 68, wherein the message is
2 conveyed by the transport infrastructure to the MPS and wherein the MPS
3 performs an operation on the message.

1 71. The system according to claim 70, wherein the MPS
2 determines the operation to be performed according to the contents of the
3 message.

1 72. The system according to claim 68, further comprising :
2 a MPS receiving module coupled to the MPS and coupled to the
3 transport infrastructure, the receiving module receiving a second service identifier
4 from the MPS; and

5 a second directory containing at least a second set of parameters,
6 the second set of parameters being required to retrieve the message from the
7 transport infrastructure, wherein the MPS receiving module retrieves the second
8 set of parameters from the second directory in response to receipt of the second
9 service identifier and wherein the MPS receiving module retrieves the message
10 from the transport infrastructure using at least some of the retrieved second set of
11 parameters.

1 73. The system according to claim 72, further comprising a routing
2 module disposed in the MPS that determines the routing of the message based on
3 the contents of the message.

1 74. The system according to claim 73, further comprising a
2 reformatting engine contained in the MPS, wherein the operation performed on
3 the message further comprises reformatting the message using the reformatting
4 engine.

1 75. The system according to claim 74, wherein the message is
2 reformatting for a platform on which the second application runs.

1 76. The system according to claim 68, wherein the message is also
2 to be conveyed to a third application, and wherein the MPS is a multicasting MPS
3 the system further comprising :

4 a MPS receiving module coupled to the MPS and coupled to the
5 transport infrastructure;

6 a second directory containing at least a second set of parameters,
7 the second set of parameters being required to retrieve the message from the
8 transport infrastructure, wherein the MPS receiving module retrieves the second
9 set of parameters from the second directory and wherein the MPS receiving
10 module retrieves the message from the transport infrastructure using at least some
11 of the retrieved second set of parameters; and

12 an MPS sending module coupled to the MPS, coupled to the
13 second directory and coupled to the transport infrastructure, the sending module
14 retrieving a third set of parameters from the second directory;

15 wherein the MPS sending module passes the retrieved third set of
16 parameters to the transport infrastructure and the transport infrastructure conveys
17 the message to the second application and to the third application.